

(FILE 'HOME' ENTERED AT 15:36:04 ON 27 APR 2007)

FILE 'HCAPLUS' ENTERED AT 15:37:31 ON 27 APR 2007

L1 908497 S (MONOSACCHARIDE OR GLUCOS? OR FRUCTOS? OR RIBOS? OR DEOXYRIBO
L2 53973 S FLUORAT? OR HALOGENAT?
L3 702 S L1 AND L2

FILE 'STNGUIDE' ENTERED AT 15:37:35 ON 27 APR 2007

FILE 'REGISTRY' ENTERED AT 15:38:00 ON 27 APR 2007
EXP DIFLUOROBENZYL/CN
EXP DIETHYL(TRIFLUOROMETHYL)AMINE/CN

L4 1 S E3

FILE 'STNGUIDE' ENTERED AT 15:39:03 ON 27 APR 2007

FILE 'HCAPLUS' ENTERED AT 15:39:35 ON 27 APR 2007
L5 0 S L4 AND L3

FILE 'STNGUIDE' ENTERED AT 15:39:36 ON 27 APR 2007

FILE 'REGISTRY' ENTERED AT 15:40:01 ON 27 APR 2007
EXP FLUOROMETHYL)AMINE

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 15:40:22 ON 27 APR 2007
SEA ?FLUOROMETHYL(W)AMINE

0* FILE ADISINSIGHT
0* FILE ADISNEWS
0* FILE AGRICOLA
0* FILE AQUASCI
2 FILE BIOSIS
0* FILE BIOTECHABS
0* FILE BIOTECHDS
114 FILE CAPLUS
0* FILE CEABA-VTB
0* FILE CONFSCI
0* FILE CROPB
0* FILE CROPU
0* FILE DDFB
0* FILE DDFU
0* FILE DGENE
0* FILE DRUGB
0* FILE DRUGMONOG2
0* FILE DRUGU
0* FILE EMBAL
5 FILE EMBASE
0* FILE ESBIOBASE
0* FILE FOMAD
0* FILE FOREGE
0* FILE HEALSAFE
28 FILE IFIPAT
0* FILE IMSDRUGNEWS
0* FILE IMSPRODUCT
0* FILE IMSRESEARCH
0* FILE LIFESCI
2 FILE MEDLINE
5 FILE NTIS
0* FILE NUTRACEUT
0* FILE OCEAN

=> file hcaplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

	SINCE FILE ENTRY	TOTAL SESSION
	0.63	0.63

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FILE COVERS 1907 - 27 Apr 2007 VOL 146 ISS 19
FILE LAST UPDATED: 26 Apr 2007 (20070426/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (monosaccharide or glucos? or fructos? or ribos? or deoxyribos? or sugar or carbohydrate or saccharide)

11586 MONOSACCHARIDE
501084 GLUCOS?
68666 FRUCTOS?
117488 RIBOS?
5443 DEOXYRIBOS?
259907 SUGAR
130250 CARBOHYDRATE
9979 SACCHARIDE
L1 908497 (MONOSACCHARIDE OR GLUCOS? OR FRUCTOS? OR RIBOS? OR DEOXYRIBOS?
OR SUGAR OR CARBOHYDRATE OR SACCHARIDE)

=> s fluorat? or halogenat?

124 FLUORAT?
53854 HALOGENAT?
L2 53973 FLUORAT? OR HALOGENAT?

=> s L1 and L2

L3 702 L1 AND L2

=> file stnguide

COST IN U.S. DOLLARS
FULL ESTIMATED COST

	SINCE FILE ENTRY	TOTAL SESSION
	2.60	3.23

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Apr 20, 2007 (20070420/UP).

=> file registry COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	3.29

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provided by InfoChem.

STRUCTURE FILE UPDATES: 26 APR 2007 HIGHEST RN 933069-51-3
DICTIONARY FILE UPDATES: 26 APR 2007 HIGHEST RN 933069-51-3

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> exp difluorobenzyl/cn

E1	1	DIFLUOROBENZOPHENONE-HYDROQUINONE COPOLYMER/CN
E2	1	DIFLUOROBENZOPHENONE-HYDROQUINONE COPOLYMER, SRU/CN
E3	0 -->	DIFLUOROBENZYL/CN
E4	1	DIFLUOROBIPHENYL/CN
E5	1	DIFLUOROBIS((-)-TRANS-1,2-CYCLOHEXANEDIAMINE) COBALT PERCHLORATE/CN
E6	1	DIFLUOROBIS(B-PICOLINE) NICKEL/CN
E7	1	DIFLUOROBIS(H ₅ -(TRIMETHYLSILYL) CYCLOPENTADIENYL) TITANIUM/CN
E8	1	DIFLUOROBIS(H ₅ -CYCLOPENTADIENYL) ZIRCONIUM/CN
E9	1	DIFLUOROBIS(H ₅ -METHYLCYCLOPENTADIENYL) TITANIUM/CN
E10	1	DIFLUOROBIS(H ₅ -PENTAMETHYLCYCLOPENTADIENYL) HAFNIUM/CN
E11	1	DIFLUOROBIS(H ₅ -PENTAMETHYLCYCLOPENTADIENYL) TANTALUM (1+) TETRAFLUOROBORATE/CN
E12	1	DIFLUOROBIS(H ₅ -PENTAMETHYLCYCLOPENTADIENYL) TITANIUM/CN

=> exp diethyl(trifluoromethyl)amine/cn

E1	1	DIETHYL(TRIETHYLGERMYL) PHOSPHINE/CN
E2	1	DIETHYL(TRIETHYLPHOSPHINE) PLATINUM(II)/CN
E3	1 -->	DIETHYL(TRIFLUOROMETHYL) AMINE/CN
E4	1	DIETHYL(TRIFLUOROMETHYL) ARSINE/CN
E5	1	DIETHYL(TRIFLUOROMETHYLSULFONYL) MALONATE/CN
E6	1	DIETHYL(TRIFLUOROSILYL) AMINE/CN
E7	1	DIETHYL(TRIMETHYLGERMYL) PHOSPHINE/CN
E8	1	DIETHYL(TRIMETHYLPLUMBYL) AMINE/CN
E9	1	DIETHYL(TRIMETHYLSILOXY) ALUMINUM/CN
E10	1	DIETHYL(TRIMETHYLSILYL) AMINE/CN
E11	1	DIETHYL(TRIMETHYLSILYL) GERMANE/CN
E12	1	DIETHYL(TRIMETHYLSILYL) PHOSPHINE/CN

=> S E3

L4 1 "DIETHYL(TRIFLUOROMETHYL)AMINE"/CN

=> file stnguide

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.85	9.14

FILE 'STNGUIDE' ENTERED AT 15:39:03 ON 27 APR 2007

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 20, 2007 (20070420/UP).

=> file hcplus

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	9.20

FILE 'HCPLUS' ENTERED AT 15:39:35 ON 27 APR 2007

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FILE COVERS 1907 - 27 Apr 2007 VOL 146 ISS 19

FILE LAST UPDATED: 26 Apr 2007 (20070426/ED)

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=> S L4 and L3

16 L4

L5 0 L4 AND L3

=> file stnguide

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.60	11.80

FILE 'STNGUIDE' ENTERED AT 15:39:36 ON 27 APR 2007

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 20, 2007 (20070420/UP).

=> file registry			
COST IN U.S. DOLLARS		SINCE FILE	TOTAL
		ENTRY	SESSION
FULL ESTIMATED COST		0.06	11.86

FILE 'REGISTRY' ENTERED AT 15:40:01 ON 27 APR 2007
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STRUCTURE FILE UPDATES: 26 APR 2007 HIGHEST RN 933069-51-3
 DICTIONARY FILE UPDATES: 26 APR 2007 HIGHEST RN 933069-51-3

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Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
 predicted properties as well as tags indicating availability of
 experimental property data in the original document. For information
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> exp fluoromethyl)amine

E1	2	FLUOROMETHOXYTUNGSTEN/BI
E2	954350	FLUOROMETHYL/BI
E3	0 -->	FLUOROMETHYL)AMINE/BI
E4	39	FLUOROMETHYLACET/BI
E5	2	FLUOROMETHYLACETAMIDE/BI
E6	1	FLUOROMETHYLACETAMILIDE/BI
E7	5	FLUOROMETHYLACETANILIDE/BI
E8	2	FLUOROMETHYLACETATE/BI
E9	27	FLUOROMETHYLACETO/BI
E10	2	FLUOROMETHYLACETON/BI
E11	1	FLUOROMETHYLACETONATO/BI
E12	1	FLUOROMETHYLACETONYL/BI

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS		SINCE FILE	TOTAL
		ENTRY	SESSION
FULL ESTIMATED COST		0.45	12.31

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 15:40:22 ON 27 APR 2007

67 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
 search error messages that display as 0* with SET DETAIL OFF.

=> s ?fluoromethyl)amine.
 UNMATCHED RIGHT PARENTHESIS 'UOROMETHYL)AMINE'
 The number of right parentheses in a query must be equal to the

number of left parentheses.

```
=> s ?fluoromethyl (w) amine
 0* FILE ADISINSIGHT
 0* FILE ADISNEWS
 0* FILE AGRICOLA
 0* FILE AQUASCI
 2 FILE BIOSIS
 0* FILE BIOTECHABS
 0* FILE BIOTECHDS
114 FILE CAPLUS
 0* FILE CEABA-VTB
 0* FILE CONFSCI
 0* FILE CROPB
 0* FILE CROPU
 0* FILE DDFB
 0* FILE DDFU
 0* FILE DGENE
 0* FILE DRUGB
 0* FILE DRUGMONOG2
 0* FILE DRUGU
 0* FILE EMBAL
 5 FILE EMBASE
 0* FILE ESBIOBASE
 0* FILE FOMAD
 0* FILE FOREGE
```

33 FILES SEARCHED...

```
 0* FILE HEALSAFE
28 FILE IFIPAT
 0* FILE IMSDRUGNEWS
 0* FILE IMSPRODUCT
 0* FILE IMSRESEARCH
 0* FILE LIFESCI
 2 FILE MEDLINE
 5 FILE NTIS
 0* FILE NUTRACEUT
 0* FILE OCEAN
 1 FILE PASCAL
 0* FILE PCTGEN
 0* FILE PHARMAML
 0* FILE PRMT
13 FILE SCISEARCH
 0* FILE SYNTHLINE
 3 FILE TOXCENTER
80 FILE USPATFULL
18 FILE USPAT2
 0* FILE VETB
 0* FILE VETU
17 FILE WPIDS
```

65 FILES SEARCHED...

```
 17 FILE WPINDEX
```

13 FILES HAVE ONE OR MORE ANSWERS, 67 FILES SEARCHED IN STNINDEX

L6 QUE ?FLUOROMETHYL (W) AMINE

```
=> file biosis
COST IN U.S. DOLLARS
FULL ESTIMATED COST
```

SINCE FILE ENTRY	TOTAL SESSION
1.26	13.57

FILE 'BIOSIS' ENTERED AT 15:41:18 ON 27 APR 2007
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FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 25 April 2007 (20070425/ED)

=> s ?fluoromethyl (w) amine

6897 ?FLUOROMETHYL

38465 AMINE

L7 2 ?FLUOROMETHYL (W) AMINE

=> d 17 1-2 ti abs bib

L7 ANSWER 1 OF 2 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
TI Synthetically useful C-4 fluorinated building blocks bearing a quaternary
stereocentre.

AN 1995:101986 BIOSIS <>LOGINID::20070427>>

DN PREV199598116286

TI Synthetically useful C-4 fluorinated building blocks bearing a quaternary
stereocentre.

AU Arnone, Alberto; Bravo, Pierfrancesco [Reprint author]; Frigerio, Massimo;
Salani, Giuliana; Viani, Fiorenza

CS C.N.R.-Centro Studio sulle Sostanze Org. Naturali, Dip. Chim. Politecnico
Milano, Via Mancinelli 7, I-20131 Milano, Italy

SO Tetrahedron, (1994) Vol. 50, No. 47, pp. 13485-13492.
CODEN: TETRAB. ISSN: 0040-4020.

DT Article

LA English

ED Entered STN: 13 Mar 1995

Last Updated on STN: 13 Mar 1995

L7 ANSWER 2 OF 2 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
TI ALPHA FLUOROMETHYLDEHYDRO ORNITHINE AND ALPHA FLUOROMETHYLDEHYDRO
PUTRESCINE ANALOGS AS IRREVERSIBLE INHIBITORS OF ORNITHINE DECARBOXYLASE
EC-4.1.1.17.

AB (E)-Dehydro analogs of α -(fluoromethyl)putrescine and -ornithine derivatives were synthesized and evaluated in vitro as irreversible inhibitors of a preparation of ornithine decarboxylase (ODC, EC 4.1.1.17) obtained from rat liver. The key step in the synthesis of (E)- α -(fluoromethyl)dehydroornithine (17) and -putrescine (14) was the addition of propenylmagnesium bromide to fluoroacetonitrile. The resulting unstable conjugated imine salt was reduced regioselectively in situ with NaBH4 or was quenched with a solution of NaCN to give the corresponding unsaturated α -(fluoromethyl) amine and α -amino nitrile, respectively. These were transformed into 17 and 14 via a 4-step sequence involving the following: phthaloylation of the amine function; allylic bromination of the methyl group; Gabriel reaction; and hydrolytic cleavage of the protective groups. (E)- α -(Difluoromethyl)dehydroornithine (10) and -putrescine (7) were prepared from ethyl tert-butyl 2-(difluoromethyl)-2-(2-propenyl)malonate and di-tert-butyl 2-(difluoromethyl)-2-(2-propenyl)malonate, respectively, via a sequence similar to that reported previously for the synthesis of the saturated analogs. Compounds 17, 14, 10 and 7 were much more potent enzyme-activated irreversible inhibitors of ODC than the corresponding saturated analogs. The increase in potency was particularly marked in the α -fluoromethyl series. The apparent dissociation constants (KI) and the times of half-inactivation of enzyme (τ_{50}) at infinite concentration of inhibitors were 2.7 μ M and 2.6 min for 17 and 42 μ M and 0.2 min for 14. The KI and τ_{50} of the corresponding saturated analogs were 75 μ M and 1.6 min for the ornithine derivative and 56 μ M and 4.4 min for the putrescine derivative.

AN 1984:236956 BIOSIS <>LOGINID::20070427>>

DN PREV198477069940; BA77:69940

TI ALPHA FLUOROMETHYLDEHYDRO ORNITHINE AND ALPHA FLUOROMETHYLDEHYDRO PUTRESCINE ANALOGS AS IRREVERSIBLE INHIBITORS OF ORNITHINE DECARBOXYLASE EC-4.1.1.17.
AU BEY P [Reprint author]; GERHART F; VAN DORSELAER V; DANZIN C
CS CENTRE DE RECHERCHE MERRELL INTERNATIONAL, 67084 STRASBOURG CEDEX, FRANCE
SO Journal of Medicinal Chemistry, (1983) Vol. 26, No. 11, pp. 1551-1556.
CODEN: JMCMAR. ISSN: 0022-2623.
DT Article
FS BA
LA ENGLISH

=> file stnguide
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
5.04	18.61

FILE 'STNGUIDE' ENTERED AT 15:41:36 ON 27 APR 2007
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LAST RELOADED: Apr 20, 2007 (20070420/UP).

=> file hcplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.18	18.79

FILE 'HCPLUS' ENTERED AT 15:43:15 ON 27 APR 2007
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=> s ?fluoromethyl(w)amine

44628 ?FLUOROMETHYL
277705 AMINE
L8 114 ?FLUOROMETHYL (W) AMINE

=> s L3 and L8

L9 0 L3 AND L8

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.60	21.39

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Apr 20, 2007 (20070420/UP).

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	21.45

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DICTIONARY FILE UPDATES: 26 APR 2007 HIGHEST RN 933069-51-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

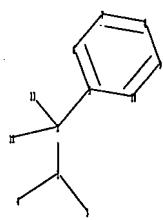
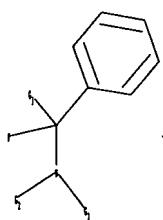
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10537437fulorinator.str



chain nodes :

1 2 3 4 11 13

ring nodes :

5 6 7 8 9 10

chain bonds :

1-2 1-3 1-4 2-5 2-11 2-13

ring bonds :

5-6 5-10 6-7 7-8 8-9 9-10

exact/norm bonds :

1-2 1-3 1-4 2-13

exact bonds :

2-5 2-11

normalized bonds :

5-6 5-10 6-7 7-8 8-9 9-10

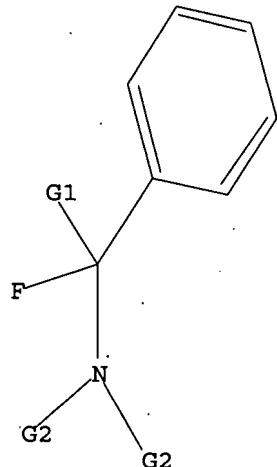
G1:H,Cl,Br,F,I

G2:CH3,CH2,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 13:CLASS

L10 STRUCTURE UPLOADED

=> d 110
L10 HAS NO ANSWERS
L10 STR



G1 H, Cl, Br, F, I
G2 Me, CH₂, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, Ph

Structure attributes must be viewed using STN Express query preparation.

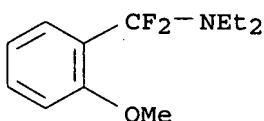
=> s 110
SAMPLE SEARCH INITIATED 15:43:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 217 TO ITERATE
100.0% PROCESSED 217 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3457 TO 5223
PROJECTED ANSWERS: 2 TO 124

L11 2 SEA SSS SAM L10

=> d 111 scan

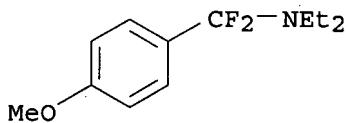
L11 2 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Benzenemethanamine, N,N-diethyl- α , α -difluoro-2-methoxy- (9CI)
MF C12 H17 F2 N O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 2 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Benzenemethanamine, N,N-diethyl- α , α -difluoro-4-methoxy-
MF C12 H17 F2 N O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s 110 sss full
FULL SEARCH INITIATED 15:44:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4361 TO ITERATE

100.0% PROCESSED 4361 ITERATIONS 22 ANSWERS
SEARCH TIME: 00.00.01

L12 22 SEA SSS FUL L10

=> file stnguide
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
172.10 193.55

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COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
0.06 193.61

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FILE COVERS 1907 - 27 Apr 2007 VOL 146 ISS 19
FILE LAST UPDATED: 26 Apr 2007 (20070426/ED)

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=> s L12 and L3

34 L12
L13 0 L12 AND L3

=> file stnguide

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FULL ESTIMATED COST	2.60	196.21

FILE 'STNGUIDE' ENTERED AT 15:44:52 ON 27 APR 2007
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LAST RELOADED: Apr 20, 2007 (20070420/UP).

=> d his

(FILE 'HOME' ENTERED AT 15:36:04 ON 27 APR 2007)

FILE 'HCAPLUS' ENTERED AT 15:37:31 ON 27 APR 2007
L1 908497 S (MONOSACCHARIDE OR GLUCOS? OR FRUCTOS? OR RIBOS? OR DEOXYRIBO
L2 53973 S FLUORAT? OR HALOGENAT?
L3 702 S L1 AND L2

FILE 'STNGUIDE' ENTERED AT 15:37:35 ON 27 APR 2007

FILE 'REGISTRY' ENTERED AT 15:38:00 ON 27 APR 2007
EXP DIFLUOROBENZYL/CN
EXP DIETHYL(TRIFLUOROMETHYL)AMINE/CN
L4 1 S E3

FILE 'STNGUIDE' ENTERED AT 15:39:03 ON 27 APR 2007

FILE 'HCAPLUS' ENTERED AT 15:39:35 ON 27 APR 2007
L5 0 S L4 AND L3

FILE 'STNGUIDE' ENTERED AT 15:39:36 ON 27 APR 2007

FILE 'REGISTRY' ENTERED AT 15:40:01 ON 27 APR 2007
EXP FLUOROMETHYL)AMINE

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 15:40:22 ON 27 APR 2007
SEA ?FLUOROMETHYL(W)AMINE

0* FILE ADISINSIGHT
0* FILE ADISNEWS
0* FILE AGRICOLA
0* FILE AQUASCI
2 FILE BIOSIS
0* FILE BIOTECHABS
0* FILE BIOTECHDS
114 FILE CAPLUS
0* FILE CEABA-VTB
0* FILE CONFSCI
0* FILE CROPB
0* FILE CROPU
0* FILE DDFB
0* FILE DDFU
0* FILE DGENE
0* FILE DRUGB
0* FILE DRUGMONOG2
0* FILE DRUGU
0* FILE EMBAL
5 FILE EMBASE
0* FILE ESBIOBASE
0* FILE FOMAD
0* FILE FOREGE
0* FILE HEALSAFE
28 FILE IFIPAT
0* FILE IMSDRUGNEWS
0* FILE IMSPRODUCT
0* FILE IMSRESEARCH
0* FILE LIFESCI
2 FILE MEDLINE
5 FILE NTIS
0* FILE NUTRACEUT
0* FILE OCEAN
1 FILE PASCAL
0* FILE PCTGEN
0* FILE PHARMAML
0* FILE PROMT
13 FILE SCISEARCH
0* FILE SYNTHLINE
3 FILE TOXCENTER
80 FILE USPATFULL
18 FILE USPAT2
0* FILE VETB
0* FILE VETU
17 FILE WPIDS
17 FILE WPINDEX

L6 QUE ?FLUOROMETHYL(W) AMINE

FILE 'BIOSIS' ENTERED AT 15:41:18 ON 27 APR 2007

L7 2 S ?FLUOROMETHYL(W)AMINE

FILE 'STNGUIDE' ENTERED AT 15:41:36 ON 27 APR 2007

FILE 'HCAPLUS' ENTERED AT 15:43:15 ON 27 APR 2007

L8 114 S ?FLUOROMETHYL(W)AMINE

L9 0 S L3 AND L8

FILE 'STNGUIDE' ENTERED AT 15:43:18 ON 27 APR 2007

FILE 'REGISTRY' ENTERED AT 15:43:34 ON 27 APR 2007

L10 STRUCTURE uploaded

L11 2 S L10

L12 22 S L10 SSS FULL

FILE 'STNGUIDE' ENTERED AT 15:44:22 ON 27 APR 2007

FILE 'HCAPLUS' ENTERED AT 15:44:51 ON 27 APR 2007
L13 0 S L12 AND L3

FILE 'STNGUIDE' ENTERED AT 15:44:52 ON 27 APR 2007

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FULL ESTIMATED COST 0.06 196.27

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=> file caplus

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ENTRY SESSION
FULL ESTIMATED COST 0.06 196.27

FILE 'CAPLUS' ENTERED AT 16:28:26 ON 27 APR 2007

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FILE LAST UPDATED: 26 Apr 2007 (20070426/ED)

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=> s 112
L14 34 L12

=> s 114 not py>2003
4144435 PY>2003
L15 11 L14 NOT PY>2003

=> d 115 1-11 ti abs bib

L15 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
TI Fluorination of thiocarbonyl compounds with bis(2-methoxyethyl)aminosulfur trifluoride (Deoxo-Fluor reagent): a facile synthesis of gem-difluorides
AB A variety of thiocarbonyl derivs. (thioketone, thioester, thioamide, dithioester, and dithiocarbamate) were converted to the corresponding gem-difluorides in excellent yields on reaction with the fluorinating agent, bis(2-methoxyethyl)aminosulfur trifluoride (I), in the presence of SbCl₃. Thus, reacting PhC(S)Ph with I gave PhCF₂Ph in 89% yield.

AN 2000:463617 CAPLUS <<LOGINID::20070427>>

DN 133:192747

TI Fluorination of thiocarbonyl compounds with bis(2-methoxyethyl)aminosulfur trifluoride (Deoxo-Fluor reagent): a facile synthesis of gem-difluorides

AU Lal, Gauri S.; Lobach, Elyse; Evans, Ann

CS Air Products and Chemicals Inc., Allentown, PA, 18195-1501, USA

SO Journal of Organic Chemistry (2000), 65(16), 4830-4832
CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 133:192747

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

TI New deposition systems and processes for transport polymerization and chemical vapor deposition

AB The described deposition systems are designed to accommodate new precursors and chemical processes used for transport polymerization and chemical vapor

deposition. The systems consist primarily of a reactor, a liquid injector or gas mass flow controller, a cracker and a deposition chamber under sub-atmospheres pressure. The cracker utilizes one or more types of energy, including heat, photons, and plasmas. This invention is especially useful for preparing F-PPX [fluorinated poly(para-xylylenes)] and other fluorinated polymer thin films for intermetal dielec. (IMD) and interlevel dielec. (ILD) applications in the manufacture of integrated circuits with features < 0.25 μm in size.

AN 1999:299550 CAPLUS <<LOGINID::20070427>>

DN 130:312775

TI New deposition systems and processes for transport polymerization and chemical vapor deposition

IN Lee, Chung J.; Wang, Hui; Foggiato, Giovanni Antonio

PA Quester Technology, Inc., USA

SO PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9922043	A1	19990506	WO 1998-US21754	19981015
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,				

MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
 TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
 CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 6086679 A 20000711 US 1997-958352 19971024
 AU 9911888 A 19990517 AU 1999-11888 19981015
 JP 2001521293 T 20011106 JP 2000-518129 19981015
 PRAI US 1997-958352 A 19971024
 WO 1998-US21754 W 19981015

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Manufacture of fluorinated poly(p-xylylene) polymers for semiconductor devices
 AB Fluorinated poly(p-xylylenes) (F-PPX) and fluorinated poly(p-fluoroxyxylenes) (F-PPFX) are manufactured by (1) selecting as starting material a fluorinating agent (SF₄, DAST) and compound YC(O)ArC(O)Y (Y = leaving group; Ar = phenylene, fluorine-containing phenylene), (2) processing the starting material to produce a tetrafluoro precursor, (3) further processing the precursor with transport polymerization or chemical vapor deposition method, and (4) polymerizing the reactive intermediate into the fluorinated poly(p-xylylene) polymers. These polymers are used for the manufacture of low dielec. films with high thermal stability and are sufficiently strong to withstand planarization and polishing for the manufacture of integrated circuits.

AN 1999:297361 CAPLUS <<LOGINID::20070427>>

DN 130:325524

TI Manufacture of fluorinated poly(p-xylylene) polymers for semiconductor devices

IN Lee, Chung J.; Wang, Hui; Foggiato, Giovanni Antonio

PA Quester Technology, Inc., USA

SO PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9921705	A1	19990506	WO 1998-US21753	19981015
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6140456	A	200001031	US 1997-957792	19971024
	AU 9910878	A	19990517	AU 1999-10878	19981015
PRAI	US 1997-957792	A	19971024		
	WO 1998-US21753	W	19981015		

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

TI Reactions of N,N-dialkylbenzamides with sulfur tetrafluoride. Formation of dialkyl- α,α -difluorobenzylamines

AB The KF-catalyzed reaction of amides R₂NCOCH₂H₄R₁ (I; R = Me, Et, Pr, CH₂CH₂CF₃; R₁ = H, Me, OMe, Br, CF₃, NO₂) with SF₄ gave amines R₂NCF₂CH₂H₄R₁. Substituent effects of the R₁ in I (R = Me) is discussed.

AN 1984:209316 CAPLUS <<LOGINID::20070427>>

DN 100:209316
TI Reactions of N,N-dialkylbenzamides with sulfur tetrafluoride. Formation of dialkyl- α,α -difluorobenzylamines
AU Dmowski, Wojciech; Kaminski, Maciej
CS Inst. Org. Chem., Pol. Acad. Sci., Warsaw, 01224, Pol.
SO Polish Journal of Chemistry (1982), 56(10-12), 1369-78
CODEN: PJCHDQ; ISSN: 0137-5083
DT Journal
LA English
OS CASREACT 100:209316

L15 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
TI Dialkyl- α,α -difluorobenzylamines and dialkyl(trifluoromethyl)amines - novel fluorinating reagents
AB The use of PhCF2NMe2 and CF3NET2 as fluorinating reagents to replace OH groups in alcs. and carboxylic acids by F has been studied. The results, which are very variable, are compared with those reported for other fluoroamine reagents.
AN 1984:34109 CAPLUS <>LOGINID::20070427>>
DN 100:34109
TI Dialkyl- α,α -difluorobenzylamines and dialkyl(trifluoromethyl)amines - novel fluorinating reagents
AU Dmowski, Wojciech; Kaminski, Maciej
CS Inst. Org. Chem., Pol. Acad. Sci., Warsaw, 00-961, Pol.
SO Journal of Fluorine Chemistry (1983), 23(3), 219-28
CODEN: JFLCAR; ISSN: 0022-1139
DT Journal
LA English
OS CASREACT 100:34109

L15 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
TI Synthetic methods and reactions. I. Selenium tetrafluoride and its pyridine complex. Convenient fluorinating agents for fluorination of ketones, aldehydes, amides, alcohols, carboxylic acids, and anhydrides
AB Selenium tetrafluoride is a general purpose, convenient fluorinating agent for a wide variety of compds., such as ketones, aldehydes, amides, alcs., carboxylic acids, and anhydrides. Addition of pyridine, which forms a complex with SeF4, in fluorination of alcs. generally prevents isomerization and allows preparation of primary fluorides.
AN 1974:81959 CAPLUS <>LOGINID::20070427>>
DN 80:81959
TI Synthetic methods and reactions. I. Selenium tetrafluoride and its pyridine complex. Convenient fluorinating agents for fluorination of ketones, aldehydes, amides, alcohols, carboxylic acids, and anhydrides
AU Olah, George A.; Nojima, Masatomo; Kerekes, Istvan
CS Dep. Chem., Case West. Reserve Univ., Cleveland, OH, USA
SO Journal of the American Chemical Society (1974), 96(3), 925-7
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English

L15 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
TI Synthetic reactions of dimethylformamide. XIX. Preparation of α -difluorotrimethylamine and some of its reactions
AB COCl2 was passed through 73.1 g. HCONMe2 in 300 ml. CHCl3 in an icewater bath as long as CO2 was formed, the solution transferred to a polythene flask, stirred, and heated in a boiling water bath in vacuo to remove excess COCl2 and solvent. The flask was placed into an ice-salt freezing mixture and dry HF passed in with intermittent shaking until the increase in weight was about 300 g. Next day, excess HF was evaporated by heating to 65° the material transferred to an Fe vessel, and residual HF removed at 120°. The residue was distilled in vacuo and the obtained intermediate trihydrofluoride, C3H10F6N (15.5 g.), b30 80°, was distilled over anhydrous KF to give 7.4 g α,α -difluorotrimethylamine

(I), b. 48-50°, n₂D0 1.3315. Similarly, 3 g. PhCONMe₂ added under ice-cooling to a solution of 6 g. COCl₂ in 20 mh CHCl₃ and the solution treated as above gave 2.1 g. α,α-difluorobenzylidimethylamine, b. 70-90°, n₂D0 1.4738. Solns. of I in organic solvents gave with BF₃ etherate a crystalline hygroscopic precipitate, C₃H₇BF₅N, m. 47-51°, v 1670, 1737, 8071, and 3141 cm.⁻¹ I (3.1 g.) treated with stirring and cooling with 1.2 g. BzOH and the mixture kept at room temperature with stirring 1 hr.

gave

1.1 g. BzF, b. 50-5°, n₂D0 1.4968, 3.1 g. I heated with 1.06 g.

BzH 3 hrs. at 85° in an Fe tube yielded 0.95 g.

α,α-difluorotoluene, b. 145-50°, n₂D0 1.4572. BzNH₂

kept with a solution of I in dioxane 20 min. at -5° gave 81.5% BzCN.

When a stirred solution of 2',3'-O-isopropylidene-6-azauridine in HCONMe₂ was treated with ice-cooling with I in HCONMe₂ and the product analyzed by means of paper chromatography, only a spot corresponding to the formate could be detected.

AN 1963:474793 CAPLUS <<LOGINID::20070427>>

DN 59:74793

OREF 59:13802h,13803a-b

TI Synthetic reactions of dimethylformamide. XIX. Preparation of α-difluorotrimethylamine and some of its reactions

AU Arnold, Z.

CS Ceskoslov. Akad. Ved, Prague

SO Collection of Czechoslovak Chemical Communications (1963), 28(8), 2047-51
CODEN: CCCCAK; ISSN: 0010-0765

DT Journal

LA English

L15 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

TI Chemistry of carbonyl fluoride. I. Fluorination of organic compounds

AB Carbonyl fluoride reacts with carbonyl compds. such as cyclohexanone, benzaldehyde, and benzophenone to give the gem-difluorides, while HCONMe₂ yields α,α-difluorotrimethylamine. Metal fluoride-catalyzed addition at the ethylenic bond in perfluoro olefins forms perfluoroacyl fluorides, while the C-N unsatd, compds. CF₃N: CF₂, PhNCO, and CF₃CN give, resp., (CF₃)₂NCOF, PhN(COF)₂, and CF₃CF₂NCO. The exptl. technique, infrared and nuclear magnetic resonance spectra are given.

AN 1963:66175 CAPLUS <<LOGINID::20070427>>

DN 58:66175

OREF 58:11243a-b

TI Chemistry of carbonyl fluoride. I. Fluorination of organic compounds

AU Fawcett, F. S.; Tullock, C. W.; Coffman, D. D.

CS E. I. du Pont de Nemours Co., Wilmington, DE

SO Journal of the American Chemical Society (1962), 84, 4275-85
CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA Unavailable

OS CASREACT 58:66175

L15 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

TI Fluorinated organic compounds

AB The title compds. can be used as chemical intermediates. Cyclohexanone 40, COF₂ 65, and HCONMe₂ 4-5 parts are placed in a reactor containing N, the reactor is closed, the mixture heated at 50° 12 hrs. under autogenous pressure, cooled, the volatile materials are removed, and the remaining liquid is distilled to give 1-fluorocyclohexyl fluoroformate (I), b₂₇ 59-63°, 52 parts. I 17, hexane 30-5, and BF₃-etherate 4.8 parts are heated at 45-7° 3 hrs., the mixture is cooled, the upper phase separated, agitated with powdered NaF, the NaF filtered off, the filtrate evaporated,

and the residue distilled through a fractionating column to give 1,1-di-fluorocyclohexane, b. 101-7°, n₂D 1.3900-1.3895, 5.6 parts.

Similarly prepared are Ph₂CF₂, b₁₅ 100-1°, n₂D 1.5360-1.5368;

PhCHF₂, b₁₅ 35-6°; 4-Me₂NC₆H₄CHF₂; (FCH₂)₂O; PhCF₃ and BzF;

F3C(CF2)2COF; F3C(CF2)6COF, b. 108-9°; FOC(CF2)3COF, b. 47-9°; FOC(CF2)2COF, b. 30-5°; 2-F3CC6H4COF and phthaloyl fluoride; Me(F2CH)NCOF and Me(HCO)NCOF; Me(MeCF2)NCOF, b. 97-100° and MeAcNCOF, b. 136-8°; F2CHNMe2, b. 47-51.5°; PhCF2NMe2, b. 63°; N-fluoroformyl-1,1-difluorohexamethyleneimine, b0-5 50°; and Me2NCF2NMe2, b. 101-3°.

AN 1963:39841 CAPLUS <<LOGINID::20070427>>

DN 58:39841

OREF 58:6752d-f

TI Fluorinated organic compounds

PA E. I. du Pont de Nemours & Co.

SO 11 pp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 909364		19621031	GB 1960-38526	19601109
	US 3213062		19651019	US 1959-852939	19591116
PRAI	US		19591116		

L15 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

TI The chemistry of sulfur tetrafluoride. II. The fluorination of organic carbonyl compounds

GI For diagram(s), see printed CA Issue.

AB cf. CA 54, 12862h. In many types of organic compds., the selective replacement of O atoms by F can be accomplished with SF4. The replacement reactions are performed by cooling the liquid or solid organic compound containing

O in a Hastelloy-lined vessel under N to -78°, removing the N in vacuo, charging the vessel with the gaseous reactants (HF, BF3, SF4, etc.), heating the sealed vessel for the prescribed period, cooling, venting, and working up by the usual processes of distillation, recrystn., and sublimation (starting material, moles, moles SF4, reaction temperature, reaction

time in hrs., product, % yield, and b.p. given): Et-CO2H, 0.60, 1.82, 150°, 8, EtCF3 (scrubbed with 40% aqueous KOH), 89, -; C6H13CO2H, 0.20, 0.65, 130°, 6, C6H13CF3, 80, 101° (n25D 1.3449); C11H23CO2H, 0.33, 2.00, 130°, 6, C11H23CF3, 88, 92°/12 mm. (n25D 1.3896); C17H35CO2H, 0.35, 2.13, 130°, 6, C17H35CF3, 93, 107°/3 mm. (m 28-30°, n25D 1.4148); Me3CCH2CHMeCH2CO2H, 0.19, 0.57, 120°, 6, Me3CCH2CHMeCH2CF3, 64, 121-2° (n25D 1.3657); 4-cyclohexylbutyric acid, 0.20, 0.60, 120°, 10, 1,1,1-trifluoro-4-cyclohexylbutane, 80, 172-3° (n25D 1.3987); CH2(CO2H)2, 030, 0.69, 40°, 16, CH2(COF)2, 70, 92-4°; CH2(CO2H)2, 0.40, 2.40, 150°, 8, CH2(CF3)2 (scrubbed with 40% aqueous KOH), 57, -; (CH2CO2H)2, 0.40, 2.40, 150°, 8, (CH2CF3)2 (scrubbed with 40% aqueous KOH), 41, -; (CH2CH2CO2H)2, 0.67, 2.23, 130°, 7, CF3(CH2)4CF3, 19, 99-101° (n25D 1.3519) [and 39% CF3(CH2)4CO2H, m. 36-8°]; HO2C(CH2)8CO2H, 0.15, 0.46, 120°, 6, CF3(CH2)8CF3, 27, 90-6°/ 20 (n25D 1.3519) [and CF3(CH2)8COF, 45%, b20 115-18°, and FOC(CH2)8COF, 21%, b20 144-6°]; HO2CCH2CH(CO2H)CH2CO2H, 0.07, 063, 130°, 10, O.CF2.CH2.C-(CF3).CH2.CF2, 20, 104-6°; BrCH2CHBrCH2CO2H, 0.53, 1.85, 140°, 8, BrCH2CHBrCH2CF3, 54, 69-75°/58 mm.; F2CHCF2CO2H, 0.15, 0.48 (and 0.03 mole BF3 as catalyst), 250°, 8, F2CHCF2CF3 (scrubbed with 40% aqueous KOH), 56, - (a run at 180° without catalyst gave only F2CHCF2COF); cyclobutane-1,1-dicarboxylic acid, 0.28, 2.32, 150°, 6, (CF3)2C.CH2.CH2.CH2, 43, 68-9°; CF2.CF2.CF2.CH2CO2H, 0.08, 0.30, 160°, 16, CF2.CF2.CF2.CHCH2CF3, 51, 67°; CH2:CHCO2H, 0.75, 2.00, 130°, 8, CH2:CHCF3 (scrubbed with 20% aqueous KOH), 45, - 26°; CH2: CMeCO2H, 0.75, 2.00, 130°, 8, CH2:C(CF3)Me, 54, 6°; trans-(:CHCO2H)2, 0.55, 2.78, 130°, 9, trans-(:CHCF3)2, 95 (scrubbed with 20% aqueous KOH),

6°; (:CHCH₂CO₂H)₂, 0.10, 0.55, 130°, 10, (:CHCH₂CF₃)₂, 58, 90-1° (n_{25D} 1.3131); CH₂:C(CO₂H)CH₂CO₂H, 0.62, 2.80, 160°, 10, CH₂:C(CF₃)CH₂CF₃, 26, 47-9° [and 41% CH₂:C(COF)CH₂CF₃, b. 90-5°]; HO₂CCH₂.CMe:CCO₂H, 0.149, 0.89, 120°, 4, CF₃CH₂.CMe:CCF₃, 31, 95-6° (and 30% CF₃CH₂.CMe:-CCOF, b. 160-1°); HC.tplbond.CCO₂H, 2.00, 2.10, 30-55°, 3, CH.tplbond.CCO₂H, 28, 22-3°; CH.tplbond.CCO₂H, 0.27, 0.78, 120°, 3, CH.tplbond.CCF₃ (scrubbed with buffer of pH 8.5 containing 450 g. NaH₂PO₄.H₂O and 220 g. KOH in 4 l. H₂O), 60, -; (.tplbond.CCO₂H)₂ (diluted with 60 g. methylcyclohexane), 0.395, 1.67, 70; 6, (.tplbond.CCO₂H)₂, 51, 40-5°; (.tplbond.CCO₂H)₂, 0.125, 0.75 (and 0.016 mole TiF₄ as catalyst), 170°, 8, (.tplbond.CCF₃)₂, 80, -; O(CH₂CO₂H)₂, 0.50, 3.00, 130°, 7, O(CH₂CF₃)₂, 35, 58-9° (and O.CH₂.CF₂.O.CF₂.CH₂, 14%, b. 91°, n_{25D} 1.3262); EtO₂C(CH₂)₄CO₂H, 0.77, 2.00, 130°, 7, EtO₂C(CH₂)₄CF₃, 14, 57-9°/11 mm. (n_{25D} 1.3725) [and 13% HO₂C(CH₂)₄CF₃, 110-11.5°/17 mm., 37-8.5°]; HOCH₂CO₂H, 0.75, 3.00, 160° 5, FCH₂CF₃ (scrubbed with 20% aqueous KOH), 48, -26.5° (and 18% FCH₂COF, b. 51°); HO₂CCH₂SO₃H, 0.2, 0.69, 180°, 6, CF₃CH₂SO₂F, 41, 105-7°; HO₂C(CH₂)₁₀SO₃H, 0.083, 0.41, 130°, 8, CF₃(CH₂)₁₀SO₂F, 42, 100-10°/0.10 mm.; HO₂C(CH₂)₆CH(CO₂H)SO₃H, 0.195, 1.61, 150°, 8, CF₃(CH₂)₆CH(CF₃)SO₂F, 33, 62-4°/0.15; BzOH, 0.25, 0.50, 120°, 6, PhCF₃, 22, 100-1° (n_{25D} 1.4133) (and 41% BzF, b. 155-6°); BzCO₂H, 0.125, 0.51, 100°, 6, PhCF₃, 13, 45-55°/ 100 mm. (and 59% BzF, b₁₀₀ 92-4°); o-C₆H₄(CO₂H)₂, 0.10, 0.55, 120°, 6, o-C₆H₄(CF₃)₂, 43, 140-4° (and o-CF₃C₆H₄COF, 23%, b. 175-8°); p-C₆H₄(CO₂H)₂, 0.10, 0.60, 120°, 6, p-C₆H₄(CF₃)₂, 76, 113-15° (n_{25D} 1.3767) (and 3% p-CF₃C₆H₄COF, b. 156°); 1,2,4,5-C₆H₂(CO₂H)₄, 0.07, 0.83, 150°, 6, 1,2,4,5-C₆H₂(CF₃)₄, 77, - (m. 73-4°); p-MeO₂CC₆H₄CO₂H, 0.44, 1.33, 130°, 7, p-MeO₂CC₆H₄COF, 63, 120-1°/ 13 mm. (m. 69-70.5°); p-O₂NC₆-H₄CO₂H, 0.67, 2.12, 130°, 7, p-O₂NC₆H₄CF₃, 72, - (m. 41-3°); 4,1,3-ClC₆H₃(CO₂H)₂, 0.20, 1.20, 150°, 8, 4,1,3-ClC₆H₃(CF₃)₂, 62, 147° (n_{25D} 1.4130); piperazine-2,3,5,6-tetracarboxylic acid, 0.035, 0.42, 150°, 6, 2,3,5,6-tetrakis(trifluoromethyl)piperazine, 20, 129°; BzF, 0.145, 0.30 (and 0.05 mole HF as catalyst), 120 °, 6, PhCF₃, 41, 100° (n_{24.9D} 1.4124); BzCl, 0.20, 0.80, 150 °, 8, BzF, 51, 149°; BzCl, 0.20, 0.50 (and 0.25 mole HF), 120°, 6, m-ClC₆H₄CF₃, 25, 138-9° (n_{25D} 1.4459); Ac₂O, 0.30, 0.20, 300°, 10, MeCF₃ (scrubbed with 10% aqueous NaOH), 50, -; maleic anhydride, 0.30, 0.60, 150°, 13, maleic acid difluoride, 71, 100-5°; dichloromaleic anhydride, 0.20, 0.47, 300°, 10, O.CF₂.CCl:CCl.CF₂, 46, 73-4°; phthalic anhydride, 0.20, 0.40, 180°, 18, o-C₆H₄(COF)₂, 93, - (m. 40°); phthalic anhydride, 0.40, 1.60, 350°, 11, o-C₆H₄(CF₃)₂, 45, 143°; BzONa (in 100 cc. cyclohexane), 0.25, 0.50, 120°, 6, BzF, 48, 152-5°; PhC.tplbond.CCO₂Na (in 100 cc. cyclohexane), 0.475, 0.52, 45°, 6, PhC.tplbond.CCOF, 71, 52-3°/2 mm.; BzOMe, 0.30, 0.60, 300°, 6, 55% PhCF₃, 98° (and a trace of BzF, b. 151°); p-C₆H₄(CO₂Me)₂, 0.10, 0.60 (and 0.03 mole BF₃), 130°, 8, p-C₆H₄(CF₃)₂, 16, 113-16° [and 26% p-CF₃C₆H₄COF, b. 154-8°; 4% p-C₆H₄(COF)₂, m. 122-4°, and a high yield of MeF]; HCO₂Me, 0.10, 32 (and 0.05 mole HF), 200°, 6, -, - (high yields of MeF and CHF₃ and a low yield of F₂CHOMe); MeO₂CC:CH.CF₂.CF₂, 0.20, 0.60 (and 0.03 mole BF₃), 140°, 16, CF₃C:CH.CF₂.CF₂, 10, 42-3°; BzNH₂, 0.20, 0.41, 150°, 8, PhCF₃, 13, 36-8°/64 mm. (n_{25D} 1.4150); BzNHMe, 0.25, 0.50 (and 0.05 mole BF₃), 60°, 4, BzF, 48, 90-4°/107°; BzNMe₂, 0.25, 0.50, 130°, 6, PhCF₂NMe₂, 17, 70-1°/15 mm. (and 1.3% BzF, b₁₃ 50-5°); phthalimide, 0.20, 0.69 (and 0.045 mole BF₃), 100°, 10, o-CF₃C₆H₄COF, 58, 176-8°; AcH, 0.60, 0.75, 50°, 14, MeCHF₂, 35, above -34°; C₆H₁₃CHO, 0.25, 0.37, 60°, 8, C₆H₁₃CHF₂, 43, 118-19° (n_{25D} 1.3688); α -polyoxymethylene, 2.33, 2.30,